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Abstract :

This work was undertaken at the FRP Pilot Plant as part of R&D efforts connected with composite aircraft development programme (NALLA). This report mainly consists of various experimental efforts put in to arrive at suitable resin, fibre systems and fibre resin ratios to be used in the composite layup proposed for the wing of this aircraft. It further projects the approach to standardise the procedure and techniques of obtaining desired fibre/resin ratios (50:50 by volume in this case) for the purpose of test laminate fabrication and mechanical design data generation. The attempts also include standardisation of processes for void free neat resin casting used in matrix property studies.